

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

Form Bi-689

FIELD DIARY

Mr. E. A. Goldman

(Official title.)

Period, Jan. 20 to Feb. 19, 1926

Mexico
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Jan. 20, 1925
Left Washington, D.C., 9.35 P.M.
for Austin, Tex, en route to the
City of Mexico.

Jan. 21, en route.
In morning in North Carolina.
Weather cloudy, cold and threatening.
Passed Atlanta, Ga. in late afternoon.

Jan. 22, en route.
Arrived New Orleans early in
morning. Quite cold for New Orleans.
About 38° at 8 o'clock A.M. and
temperature dropping, cloudy and
a cold wind blowing. Left at 12.10
P.M. Green leaves noted on some of
the shrubs, and green grass and
herbage in places in the swamp
country traversed in Louisiana.
Arrived at Houston where I changed
/

Jan. 22 con.
Trains. at 10.45 P.M. and left at 11.20
for Austin.

Jan. 23. Austin, Tex.
Arrived here 6.40 A.M. Weather cold,
a snow storm began about 5 A.M.,
and it snowed rather lightly, but
nearly continuously all day, but
checked up in evening when it was
estimated at least 2 inches had fallen.
Snow melting on some of the pavements
about as fast as it fell. Very
unusual weather for Austin.

Went to office of Turner E. Hobby,
Fish and Game Commissioner and
learned he was out of town, but was
called on telephone and I am to
meet him tomorrow.

Jan. 24 (Sun.) Austin, Tex.
Heavy snow in morning, but
aband about 10 A.M. and snow
began melting very fast - much
of it gone by late afternoon in
the town.

Met Col. J. E. Hubby in late
afternoon, had satisfactory con-
ference with him and left at 7 P.M.
for Laredo.

Jan. 25 (Mon.) Laredo and
en route to Mexico.

crossed the border at 8.30
A.M., and left Nuevo Laredo at 10.55
A.M.

Route as far as Monterrey which
was reached in the evening is
over generally level plains with
mountains rising steeply in places
only a few miles. These plains
are fairly well over grown with

Jan. 25 con.

small mesquites, tinisaches (Acacia farnesiana) with Croton a fairly abundant species in places. Several ^{low-growing} species of cactus and yuccas are also common.

Mountains appear notably south-west of Villaldama, and appear to rise to perhaps 4000 feet, their tops covered with what ~~seemed~~ to be low-growing timber. These mountains are precipitous in places and deeply scored by steep-sided canyons. Had a good view of Cerro de la Silla from Monterrey. The town seems to be half-encircled by fairly high mountains, with Cerro de la Silla in an outlying group.

Many pepper trees - "árbol del
peru" (Schinus molle) seen along
the way most of the day, and
while there tend to be most in
evidence along fence rows they
also grow ~~singled~~ with the
general growth of cacti and
tree yuccas which in places
become practically forest as
a dominant type. A few
Taxodium of fairly large size
seen along streams.

Jan. 26. en route City
of Mexico.

Early in morning we were a
short distance south of San
Luis Potosí and here and ex-
tending far to the southward the
rolling, dry plains bear in
many places a heavy growth
of desert vegetation. Much larger
cactuses, including the large
nopal - the tuna producer were
in evidence often towering over
the one story native houses
along the way. Some of these
are picturesquely set in tuna
cactus growth close to the
walls and tree yuccas also
grow close about them. Another
large cactus much in evidence
is the garambullo. At many
points along the way the
natives were out in force selling

Jan. 26 con.

oranges, sweet limes, granaditas, and many other things including a few inferior opals. Some small orchards near railroad stations were heavily loaded with the refining sweet limes.

Zones, country seen all along the way yesterday and today seems easily assignable to Lower Sonoran Zone to a point not definitely determined north of the Valley of Mexico where in reaching a higher altitude the familiar types of desert veg. disappear, the country becomes more open and grassy and small oaks appear on the slopes of the hills apparently marking the lower edge of Upper Sonoran Zone.

6) arrived city of Mexico 8 P.M.

Jan. 27 (Wed), City of
Mexico.

Routine business today. Made
two trips to American Embassy.
Saw ambassador James R. Sheffield,
and Counselor of Embassy H. F. A.
Schoenfeld.

Jan. 28 (Thurs), City of
Mexico.

Went in morning to Museo Nacional
de Historia Natural and learned that
Prof. Alfonso Herrera is in Orizaba
and that Sr. Contreras is acting
director in his absence. Went with
Sr. Contreras to the Secretaría de
Agricultura y Fomento and had
a satisfactory conference with
Jose R. Alcaraz, Director ^{General} de
Caza y Pesca, and made an

Jan, 28 con.
appointment to meet the Secretario
de Agricultura y Fomento tomorrow
at noon. In afternoon went again
to Museo Nacional and after
meeting through Sr. Contreras the
ornithologist, Prof. Valentin Santiago,
who is to accompany me we visited
the zoological park near Chapultepec.
In the late afternoon presented a
letter from the American Embassy
to the Secretaria de Relaciones
Exteriores, An under secretary who
seemed to be very friendly
promised to take the matter of
circular letters up with the
Secretary and send letters to my
hotel.

Jan. 29 (Fri) City of Mexico.

Spent morning in making trips to three principal markets of the City to get information in regard to sale of ducks.

Ducks in market. Four species were found in the markets today. The largest number all told, was in the market of San Juan de Leluan where there were about 200 for sale at 10 a.m. Most of ~~these~~ were plucked except for the heads, but a considerable number were unplucked. The species in about equal proportions were *Dasila acuta*, *Spatula clypeata*, *Querquedula discors* and *Nettion carolinense*. Part were said to have been brought from Lake Texcoco, and part

Jan. 29, con.

from a place called El Peñon.
Market people say they begin
to come in in November and
leave in the latter part of
February. The birds were not
fat.

Afternoon devoted to
routine matters. Had a talk
with George Wythe, Asst. Commercial
Attache' of the American Embassy.

Visited Dirección de Estudios
Biológicos and met the Sec.
of the Director, Dr. Leopoldo
Flores and the Administrator
of the office Prof. Marcos Biebra.

Jan. 30 (Sat), betg of Mex.
Trip to open water area near El
Prión.

Ducks. Here no shooting of any
kind is permitted by the owner.
Ducks were massed on the water
giving it a dark color relieved
by the white breasts of the
pintails. Estimated here ⁷⁵⁰⁰⁰ 50,000
ducks of which about 60% were
Querquedula cyanoptera and ~~most~~
^{about 25%} of the remainder Pafila acuta,
with 10% Querquedula discors
and the remainder a sprinkling
of Nettion carolinense and
Spatula clypeata, and other birds
as follows: Fulica americana
a few in the edge of the marsh
mainly.

Theriacus hudsonius. 1 male flying
over ducks, that showed a little
11

Names furnished by Lopez

Zarceta coyota } Z. cyanoptera
" colorada }

Zarceta de verano - Z. discors,
come early as September, especially 1st.

Zarceta de invierno - Z. carolinensis.

Jan. 30 con.
uneasiness as it passed, a few
rose a few feet from the water
and settled down again.

Colymbus dominicus, several
small grebes apparently of this
species.

Melospiza, a few song sparrows in
flocks and a small cove in edge
of water.

Ardea herodias

Pyrannus vociferans

Pelecanus (wh) - About 100 flying over
valley bottom west of Palm Springs.

Jan. 31 (Sun), City of
Mexico.

Remained in town - no official
work.

Feb. 1 (Mon), City of Mexico,
Made a trip with guide furnished by the Director Forestal y de Caza y Pesca to various points near the old bed of Lake Texcoco to investigate use of arroyos. We found however, that the only ones in that section had been fired early this morning. A high wind filled the air with dust and conditions for work were not very favorable. We examined the ducks being brought out by canoe from one of the arroyos of these ducks there were about 150 about equally divided between pintails, blue-winged teal and spoonbills, with a few cinnamon teal. We went on.

Feb. 1 con.

as far as Los Rios on the
Interoceanic R.R. south of Lake
Texcoco near where arvadars
are placed, but owing to high
wind none were in use
today.

Arvadars. Learned from guide
that the arvadars are moved
frequently from one place to
another. A special permit is
required by the operator and
they are authorized to fire
a battery only twice a week.
A battery consists ordinarily of
110 guns, but sometimes double
this number are used.

Ducks. Near Prión I had an
opportunity to see again the
place visited Saturday and
found a similarly large

Feb. 1 con
number of birds there. I got the
impression today that there
was perhaps a larger proportion
of pintails. My guide said it
is the only place that ducks
are never shot at. It belongs
to the Cervantes estate and he
told me that the owner had
refused 300 pesos for permit
to fire a single armada.

In afternoon saw Mr. C. G. Ray,
who has lived in this country
23 years and is an enthusiastic
hunter and undoubtedly well-
informed. Mr. Ray says ducks
in general are decreasing in
numbers in and about the
Valley of Mexico and he ascribes
this to the use of the "armadas".
He estimates that there are 50

Feb. 1 con,
arvadas in the state which are
fired at least once and many
of them twice a week from the
1st of Nov. to the end of March.
As many as 2000 are killed
at a discharge, the number of
guns being usually about 100
but another 100 is sometimes
set above them and all fired
simultaneously. Mr. Ray says
there are not more than 50
Mexican hunters who hunt for
sport, and he does not seem
to consider them real
sportsmen. He is not in favor
of having enacted a complicated
set of game laws that will
not be enforced. He favors
only 2 measures, the stopping
of the use of arvadas and the

Feb. 1 con.

trapping of ~~Bob~~ white quail,
which he says is carried on
on a large scale for market.

Cochino, Mr. Ray hunts quail
near Cuernavaca, about the 5th

of December last he made a trip
and found that many of the birds
were very small, these being late
hatched young, and he says that
these birds were just becoming
worth while to shoot yesterday
when he was down there. Formerly
he hunted quail in the Valley
of Mexico, but he says they
are all gone. They are taken
in traps at all seasons for
market, and this should be
stopped, but he does not favor
restricting the season for
shooting.

Feb 1, con.

Mareca americana, Mr. Ray says these ducks occur in rather small numbers.

Anas platyrhynchos, Mr. Ray says he first saw this species about 6 years ago, but they are not very plentiful.

Aristonetta valisineria, Mr. Ray says canvas-backs first appeared about 6 years ago and are becoming rather common.

My guide told me that he found one outfit using an arwoda before the opening of the season Nov. 1st, and one man threatened him with a gun, but he shot the man through the arm with his pistol. The owner of the arwoda was fined \$500. This was the reason.

Feb. 1 con

Lake Texaco has been in process of being drained through the Grand Canal leading to the lagoon of Zumpango for many years. Along the line of the Inter-oceanic R.R. leading to Los Reyes the embankment now serves to some extent as a dam as shown by the height of the water on the south side along the track and the drained condition on the Lake Texaco side (north or north east side). Great clouds of whitish dust rise from the vicinity of the old lake bed whenever the wind blows, and this has become troublesome in the city.

Feb. 2.

Name of guide Guais arriola.
Started out 8:30 a.m.

Don Carlos Lopez tells me
that no one is allowed
shot with shot gun within
2000 metros of an arriola
while it is being placed
or within this distance of
its position.

Made trip to vicinity of Cerro del
Peñon, but found that owing to
windy weather arriolas had not
been placed.

Feb. 3.

Cratogeomys merriami. Many workings seen in pulque plantations near Zumpango. Soil here is rather sandy, but forms a deep rich, rather dark loam.

Carpodacus m. frontalis. Singing about houses at Zumpango. Common here.

Tamias l. eximius. Several seen along road near Zumpango.

Astronotus valisineria - at least 2000 seen on Lake Zumpango; and about the same number on open water in another lake - Abasco ~~Estero de San Mateo~~ de San Mateo.

Feb. 3 (Wed.), City of Mexico. Trip to Zumpango and return. Left City of Mexico at 8.30 A.M. and followed main road by motorcycle and side car through Villa Guadalupe to Zumpango. The Laguna of Zumpango occupies a large part of the bottom of a valley is irregular in outline and several miles in diameter, located in a valley somewhat lower than the Valley of Mexico, like which it is said to have no natural outlet. The water here is not at its highest former level, but is said to be higher than usual owing to abundant rains during the season. A dike across the valley holds the water off a large area that is cultivated to corn and wheat.

Feb. 3 con.

Grand Canal. This canal begun in 1879 and completed in 1900 has largely drained the Valley of Mexico and relieved the menace dating from colonial times of the inundation of the city by Lake Texcoco. The canal perhaps a 100 feet deep where it enters a tunnel near Zumpango was enterprising regarded as a great engineering feat in Díaz' time. It carries the sewage of the city and when I saw it was a swiftly running stream 15 or 20 feet wide and apparently several feet deep. The water is dark and has the usual sewage stench. During ^{a following} heavy rain ~~on~~ it carries a much larger volume of water. It is obviously responsible, along with the canal

Feb. 3 am.

system leading to it, for the
marked lowering of water which
according to Mr. C. G. Ray has
exposed about 600 square
miles of valley bottom.

Feb. 4, City of Mexico, Mex.
Long trip to various parts of the
valley, including Puñon de los Baños,
and Chalco by motor cycle and
side car.

Left town about 7.30 A.M. and
visited first various points on
the old Lake Texcoco bed near
Puñon de los Baños. Located an
arvoda, but could not examine
it and after waiting about 2 hrs.
in hopes it would be fired my
guide Genaro Arriola took me to
points on the former bed of
Lake Chalco. This included the
former Hda. of Ties formerly
~~practically~~ an island rising
from the lake. This is a volcanic
hill about 300 feet high. From
this point I had excellent views
over a wide expanse of former

Feb. 4 con.

lake area. Water is now limited to small areas on which there were a larger number of ducks, but these I was unable to approach.

Lake Chalco. This large ^{lake} ~~area~~ is to have been drained except an area of perhaps 100 acres surrounded by marshy ground. Much of the former lake bed has been cultivated, largely in corn and wheat, but during recent years has said to have become unproductive and is largely abandoned. The ~~good~~ soil is dark and one would suppose should be fertile, but although there is plenty of moisture the size of corn stalks, in addition to reports of people is evidence that

Feb. 4. am.

crops do not thrive.

owing to a broken spring and
the trouble we were obliged to
leave our machine about 10
kilometers out of town and
return in a "camion".

Feb. 5.

Nycticorax n. naevius, Several seen in marsh near Piñon. Also about a dozen noted in trees in Alameda.

Catherpes mexicanus, Several common were noted in buildings in heart of city. One on National Theater.

Coccyx li-cavus back.

Feb. 5, City of Mexico,
Trip to near Piñon, but was
unable to locate armada.

Feb. 6. City of Mexico,
Remained in town conferring
with officials.

Feb. 7. (Sun) City of
Mex. No official work.

Feb. 8, City of Mex.

~~Top~~
Anas albifrons, Lopez claims
that this is the goose that
most frequently enters the valley,
especially south of Lake Chapala,
of Mex.

Anas hyperborea. Lopez says
carries here at times in hard
winter, but he has not seen
them except farther north.

Feb. 8 cen.

Chichiguilobos (plains in
(granite) yellow logs etc.

Come about middle of Aug, and Sept
Killed with armadas and nets
Leave and return north in
May.

Barthanna - formerly in
large numbers, but now very
few. Lopez thinks they take
a route through Moilas
where a good many are
now seen. Perseus ranch
here. He thinks they have
changed route to avoid per-
secution.

Trip today Piñon Viejo. Considerable
change there since for detailed
examination Jan. 30. Today found
the following: Dafila acuta
in great preponderance, probably

Feb. 8 con

70% with in abundance
Querquedula discors 20% - 2.
Cyanoptera 5%, Asistonetta
valisineria 4%, Nettion carolinense
1%.

All of these are more or less mixed together. Flocks of various birds often form small groups by themselves. ~~Canas~~ Dafila acuta busy feeding, standing straight on their heads. ~~Canas~~ backs diving among them in open water.

Feb. 9. (Thurs.). City of Mex.

Made a trip to the Abasco of Pánuco
Viejo where I saw about 100,000
ducks, as I looked over a larger
area than had been visited pre-
viously.

Feb. 9 con.

Ducks. Those seen today were preponderantly Dafila acuta, with D. cyanoptera second, and D. discors third, and a comparatively small number of Aristonetta valisineria.

Dafila acuta, with sun in favorable position these ducks in large numbers present a wonderful sight feeding, standing on their heads, two long tail feathers now growing out projecting nearly straight upward as they balance themselves by paddling with their feet.

Aristonetta valisineria. These ducks appear scattered among the pintails, swimming and diving, their motions in marked contrast to those of the pintails.

Querquedula cyanoptera. These swim among the pintails, or in flocks

Feb. 9 con.

by themselves, especially along the borders of the gravel wash, where they often work out among the coarse vegetation in the shallower water.

Botaurus lentiginosus. One was flushed from the wash at Piñon Viejo today.

Leucorodias egretta. A white heron that I took to be this species was seen flying.

Colymbus nigricollis californicus
A ^{single} grube that appeared to be of this species was seen today at Piñon Viejo.

Feb. 10 (Wed). City of Mexico. Confering with officials. Saw Lopez in morning and had talk with Mr. C. G. Ray. In afternoon saw Herrera and identified some mammals.

Feb. 10 em.

for him at Museo Nacional where
I also met his assistant in charge
of mammals, Prof. Alfonso M. Toboada.
Mr. Ray gave information as
follows:

Dafila acuta, Arrive from 1 to
15 of Dec. (Ray)

Luzquedula discors

~~Luzquedula~~

Nettion carolinense

} First ducks to
arrive in fall
the blue wings

in large numbers and green wings
in smaller numbers. (Ray)

Aristonetta valisineria. Begin to
arrive about middle of Jan. and
increase for some time. (Ray)

Nyroca americana, A few come
along with canvas backs (Ray)

Mareca americana. A few arrive
between Jan. 1 and Jan 15 (Ray).

Anas platyrhynchos, A few arrive
in January. Not seen until about

Feb. 10. con.
6 years ago. (Ray).
Anas - a fine black mallards
seen during winter, but very
rare (Ray) ~~large?~~

Melospiza. Ray suggests ~~low~~
open season on turkeys should
end by March 1st when they
begin to gobble he says.

Colinus. Ray suggests open
season on quail should be
Jan, Feb. & March to ~~also~~ avoid
breeding season and shooting of
many immature birds.

Ducks. Counted by manos, Ray
says 4 ducks 1 mano and he
thinks 8 manos make a cuato.

Anser. a. albifrons. Ray says
white-fronted geese come pretty
regularly as far as Lake Chapala
where he has hunted them, but he

Feb. 10 am.

thinks they leave about Feb. 15.
He has never seen any geese in
the Valley of Mex.

Feb. 11 (Thurs). Left of
Mex. Trip in search of arvodas.
Found one being placed near
Piñon Viejo and took pictures.

Arvoda. Mud was built up
about 1 foot above water in rim-
circle as support for 116 guns. Mud
covered with hay. Guns placed
^{about 3 inches apart}
~~close together~~, all but one were
simply barrels of old muzzle
loaders or small gas pipes about
 $\frac{3}{4}$ inch inside diameter, each was
fastened at base to a piece of
wood used as ~~an~~ anchor.
A few stumps of ~~gas~~ sledge placed
in muzzles of guns said to
prevent whistling if wind should

Feb. 11 con.

Blow as this scares ducks.

Guns concealed by grass, cut and laid over them. Fired by train of black powder connecting all with central gun which has a hammer and cap. Train of powder covered by pieces of sheet iron laid side by side. Fired by pulling string several hundred yds. away. Amvoda showed by 10 min. head of a captain. Ducks sold to dealers at about 12 1/2 cents each. Men grumbled at my approach, and were evidently not very anxious that I should see how work was carried out.

Feb. 12, City of Mex.

Trip to near Pinar Viejo where two arrodas were fired and pictures finally secured. Went with several Arrodas and motorcycles - side car very early in morning to a place where we were told yesterday one would be fired.

Arroda. We arrived about 8 AM just in time to see arroda fired and to reach the ground before the ducks were gathered. Men surrounded the area over which the birds were shot, gathering birds and closing in gradually. When they narrowed the circle to a point just inside the arroda about 50 crippled ducks were left and

Feb. 12 con.

these were killed by being
chucked - struck over the head
with sticks, one grabbed in
the water and neck wrung.
When gathered the birds were
towed into a cholupa, as a
canoe is called here. The
ducks were largely spoonbills,
with considerable proportion
of S. discors^{1/3}. Guns of which
there were 100 here were
dismounted by the discharge,
some thrown backward into
the water. Ducks killed about 500.

Arrada, at another arrada -
the one located yesterday when
it was being arranged, I found
about 9 o'clock ~~that~~ ^{noon} that the men were
watching from the ditch banks
within about 400 yards. About

Feb. 12 con.

2000 pintails were ^{mostly} ~~grouped~~
in lines and bunches in ~~the shallow~~
water ~~about~~ 2-3 feet deep, in
which coarse sedges were growing.
A considerable number was
in front of the guns and within
range, but others were being
very slowly herded in by men
using 2 horses which were led
along, the men walking on
the outer side near the horse's
shoulder. Very slowly and
carefully the ducks were
rounded up, the men with
the horses making long stops
in places and waiting for
the birds to move slowly
in the direction desired. This
operation took about 3 hours,
the armada being fired at
11:30 A.M. I had arranged for

Feb. 12 am.

a canoe to ~~to~~ take me to the
spot where the arvoda was
located, but the river closed in
so rapidly I did not reach it
until the ducks had been
gathered. Secured photos of ducks
in canoe, and of the general
excitement following the firing of
the arvoda. About 500 ducks were
killed, all of them pintails. 10
men were partners in this
arvoda, under one of ~~of~~ their
number, called the capitán.
The horse used in herding
ducks is called the "Sanchito".
One of the owners explained to me
that 2 pintails are counted as
a "mano", but it takes 3 forbills
and 4 teal to count as a mano.
Eight manos are one "cunto" and
a total number of cuntos make up

Feb. 12 con.

the bill. The birds are gathered and counted in this way, and then divided among the "socios". Purchasers sometimes take the birds on the ground, ~~and~~ The price paid varies widely and I was unable to get any definite information as those interested were reluctant to talk or furnished what I believed to be ~~my~~ ^{about} information. In the market 90 cents is asked for pintails. Geese are worth about 40. Two were offered for 75. ~~#~~

Pinon Viejo. Many ducks still on large charcos at this point. Those seen today largely pintails and 2. divers. ✓

Feb. 13, City of Mex.

Day spent in getting routine
out of way. Went to Museum
and identified a number of
mammals for Herrera.

Feb. 14 City of Mex.

Trip to Grutas del Tuxtla with
Erriola. Also to Lake Xochimilco.
Grutas del Tuxtla are caves in
the side of a volcanic cone
about 1000 feet high (above the
valley) near Tuxtepec.

Leptomys nivalis. This species
in a colony of hundreds lives in
summer in ~~the~~ one of the Grutas
del Tuxtla, but evidently migrates
in winter as we found no very
recent signs of their occurrence.

Xochimilco. Examined propagating
gardens of Dept. of Agriculture at the

Feb. 14 con.

point where trees and plants of various kinds are grown for distribution said to be largely to agricultural schools. The chinampas are now fast lands, the water being much lower than formerly. The city water supply comes from large springs formerly under Lake Xochimilco which has now been drained. A fine water plant to supply the city was finished in 1910 at a cost of 17 million pesos. This includes a pumping plant to provide sufficient pressure to carry the water in large volume to the city. Salix pyramidalis is the tall willow growing so abundantly on the bed of Lake Texcoco according to man in charge propagating gardens.

Feb. 16, City of Mex.
Principal day of carnival and
everything closed.

Feb. 17, City of Mex. to
Lerma.

Left Mexico 3 P.M.; arrived Lerma
5.38. Train climbed over ^{Sierra} Cerritos de
las Cruces.

Flora. Passed through pine belt,
including moderns evidently
Transition. Upper slopes in fire
and spruces, Cedars, and
on descending into Valley of Toluca
noted that pines extend well
down toward valley bottom.

Feb. 18, Lerma

Trip by canal. Lerma river
much choked by water
hyacinths.

Melospiza
43 Colaptes auratus - but for cow food.

Feb. 18 con.

Podilymbus pod.

~~X~~

Anas diazi - pate real local name. Said to remain all year. A pair flushed from tules. Also seen in small flocks of 20 to 40.

Jack snipe - agachona - flushed ^{here} from marsh. Said to be common in places and rivers all winter.

Pintail, said to be most common duck, about 3000. "golondrina"

Mareca americana. Several seen. Local names "panadero" and "socanatti".

Laguna cyano. About 2000.

Spoonbill. A few. Local name "bocon" and cuarusmús.

Laguna discors. A considerable number.

Feb. 18 con.

Canvas back - Three - local name "cuaco"

Green-winged teal, said to still occur, but not pointed out by me. Local name "golondrita"

Falco - about 2000, local name "gachureta"

Quail, cyano. Local name "sarcita coyota"

L. cyano.

Spoonbill

Canvas back

L. discors

Pintails

Jack snipe

L. discors

sarcita tulara

About ducks

San Carlos de la

Manza, north of Tuma a few miles.

Sooty tern

Barn Swallow

Herons had.

Feb. 18 con.

Man of Cbarco de la Manza
preparing an armada.

60 large ducks are called a
"monton". = 30 manos. Now about
4 or 5 montons are killed by an
armada discharge, but at times
15 or 20 montones.

Ducks are said to have been
unusually few this year.

Ducks buyers pay about ⁷⁰ to a
monton = 60 ducks.

Gallineros are also killed and
count 3 to a mano.

About 10 or 12 armadas used
near Terna.

Feb. 18 con.

Effect of water on birds: In
valley of Mex. it is believed that
tequisquits or muskrat balls
in water purge birds and give
them good flavor. But in
valley of Toluca they claim that
the birds are better because the
water is clean. They say that
birds with white bellies have
these stained in valley of Mex.
while here the birds ~~have~~
maintain pure white bellies.

Marsh, consists of a mixture of
lutes and cattail flops - lutes
about 8 ft. above water - interrupted
by patches of various species of
sedges.

Crotophaga, a few marsh
wrens are heard giving a few
guttering notes.

Feb. 19 (Fri.), Lerma to
Acanbaw.

Left Lerma 9.55 A.M., Drive at
Tultuango, country high to this
point, - level or gently rolling
grassy plains, with numerous
oaks in groups on the horizon,
Oak timber and a few pines
extend down to within 500 ft.
of the general level in places.
Near Tultuango we pass through
a cañon with oaks along
the banks and drop rapidly
several hundred feet.

Valley of Toluca, where soil
is evidently largely a loam
grassy plains country without
cacti or other veg.

Zones, Upper Sonoran, of
Valley of Toluca indicated by
absence of higher trees and

Feb. 19 con

megamites

Near Tultuango, Oaks numerous,
large cacti appear at
same level in valley. Oak
tree at small ranch in Sonora.
Some flowering plants have
not been flowering during winter
much. I observed flowering.

Bananas, Frost killed of June,
but apparently not entirely
killed.

Zones, Tepic (set 2235) still
Upper Son., but a sharp dist. north
road runs down rapidly into
lower country considerable brush
appears with flowering trees. The
trees and acacias, thickets of
large Opuntia, and a few pines
trees noted near Mazamora. Hills near
are in Upper Son.

Anas platyrhynchos platyrhynchos

Anas diazi

Anas rubripes neomexicana

Chaulelasmus streperus.

Mareca americana

Mellion carolinense

Rerguedula discors

Rerguedula cyanoptera

Spatula clypeata

Spatula a. tizjiboa

Nyroca americana - redhead

Aristonetta valisineria

Fulix marila - scarp

Fulix affinis - green scarp

Anas byssinorea byss. - Snow geese

" " nivalis - Greater snow geese

Anas rossi -

Anas a. albifrons

Branta c. canadensis

Legal Matter.

Nov. 6th 1925 Smith wrote to Lopez
to inform him of when permit to
ship 10000 quails in Texas had
been given, also asking whether
Lopez claimed to represent
the U.S. & Mexico Com.

Nov. 23, 1925

Boyd gave Smith full power and
authority as his agent in the
importation of quails from Mexico.

Thursday E.

Smith in Sept. came to Lopez
and tried to buy him, Lopez
asked for certificate from the U.S.
and Lopez gave permit.

Then Texas asked for permit for
10000 quails and ~~Smith~~ Lopez
wrote, asking regarding the 10000
quails from Boyd, Kent, and Smith
who both Nov. 6th.

July 1925 - Swans in band
number as far south as Fort Bluff

Blue wing = zarata de verano

Bartramia longicauda comes
about middle of Aug. and remain
about a month on way south. Return
middle of May.

Dec. 28, 1925 - Smith wrote
Kent, referring to letter from him
and expressing surprise that
he should have made such a
mistake as to a friendly letter.
Kent offered mail from St. Joseph
Mo.

Permit issued on application
of Swift Oct. 2, 1925 this
was later refused by a permit
for Kansas & Oklahoma.

Left out Swift to see along which
the road was away and the
road was Jan 6, 1925.